

**AMENDMENTS TO THE SPECIFICATION:**

Please insert the following heading on page 1, after the title of the invention and before line 1:

**BACKGROUND OF THE INVENTION**

Field of the Invention:

Please insert the following heading on page 1, between lines 4 and 5:

Description of the Related Art:

Please insert the following heading on page 1, between lines 28 and 29:

**SUMMARY OF THE INVENTION**

Please insert the following on page 2, after line 2:

**BRIEF DESCRIPTION OF THE FIGURES OF THE DRAWINGS**

FIG. 1 shows the optical absorption spectrum of the untreated fraction of solutions 1 to 4;

FIG. 2 shows the optical absorption spectrum of the fraction of each of solutions 1 to 4 subjected to UV irradiation for 180 hours;

FIG. 3 shows the optical absorption spectrum of the fraction of solutions 1 to 4 subjected to heating at 65°C for 15 hours;

FIG. 4 shows the optical absorption spectrum of the fraction of solutions 1 to 4 subjected to heating at 65°C for 15 hours followed by UV irradiation for 15 hours;

FIG. 5 shows the idealized structure of a  $\text{TiO}(\text{OH})_2$  polymer ribbon;

FIG. 6 shows an absorption spectrum for a specimen using a Cary UV-Vis-NR absorption spectrometer; and

FIG. 7 shows an absorption spectrum for a specimen using a Cary UV-Vis-NR absorption spectrometer.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

On page 3, please amend the paragraph beginning on line 16 and ending on line 18:

The temperature hold time ~~which~~ depends on the temperature. For example, when the solution is held at 65°C, a time of 24 h is sufficient.

On page 4, please amend the paragraph beginning on line 22 and ending on line 31:

When a composition according to the invention is prepared by a method using DMF, it contains dimethylammonium chloride and formic acid. These constituents may be detected for example by proton ( $^1\text{H}$ ) NMR analysis, which also makes it possible to determine the quantity thereof. When ~~it~~ the  $C_{Ti}$  concentration in the initial reaction mixture is less than 1M, the composition is a colloidal solution of uncrosslinked polymer in DMF. When the initial concentration  $C_{Ti}$  is greater than 1M, the polymer is crosslinked and the composition is in gel form.

On page 8, please amend the table beginning before line 10:

<del>TiO(OH<sub>2</sub>)</del> <u>TiO(OH)<sub>2</sub></u>	N	R(Å)	$\Sigma \times 10^2(\text{Å})$	$\Delta E_o(\text{eV})$	P(%)
Ti – O	3.91	1.89	1.3	0.48	
Ti – O	2.08	1.98	2.8	0.00	2.32
Ti – Ti	2.28	2.92	6.3	2.84	
Ti – Ti	1.1	3.27	1.7	6.85	